Some comments on the recent paper by Michael E. Archer (*BJENH* 20: 75–94)

This paper, entitled 'Current knowledge of British Aculeate Hymenoptera with special reference to the occurrence of high quality species on Priority Habitats' makes a number of recommendations and statements that could actually result in activities that damage the interests of aculeate conservation and general invertebrate conservation. Towards the end of the paper is a section entitled 'Good and bad management of habitats for aculeate species'. Within this section, the paper provides some general advice on habitat management for aculeates. It includes one statement "grasslands should only be subject to low level grazing to keep habitats open and maintain flower-rich areas". Grassland is a broad, highly variable habitat category that supports a large number of aculeate species (including many rarities) and aculeate assemblages. Some of these specifically require areas of short-cropped turf for at least part of their life cycle (much as certain butterflies do) and their populations would be placed at risk if traditional grazing patterns were relaxed to 'low-level grazing' as advocated. This includes the plethora of bees that feed on flowers such as *Lotus*, *Trifolium*, *Hippocrepis*, *Thymus*, *Pilosella*, *Bellis*, *Veronica* etc. and also the many wasps that hunt within these conditions e.g. *Odynerus melanocephalus* (Gmelin) which obtains its prey (larvae of the weevil *Hypera postica* (Gyllenhal)) from *Medicago lupulina*, and the spider wasp *Aporus unicolor* Spinola which attacks the spider *Atypus affinis* Eichwald on short turfs. There are also other grassland aculeates that are sensitive to even light grazing e.g. *Andrena hattorfiana* (Fabr.) which depends on an abundance of *Knautia arvensis* at many of its sites, or species like *Andrena proxima* (Kirby) which requires taller umbellifers (all plants that can be easily damaged by stock). This general advice is also unsuitable for species-rich hay meadows, not all of which are automatically subject to aftermath grazing as a tradition. In essence this is an unsafe recommendation even as a generalization.

The paper recommends "keeping the bottoms (of hedgerows) fully exposed to the sun". Whilst it is true that hedge banks can support plentiful ground-nesting mining bees in spring before herbaceous plants have started to grow, by summer the grassland and tall herb that develops alongside hedges (typically shading out the bottoms) play a crucial role in supporting rich aculeate assemblages, particularly where flowers such as umbellifers, crucifers, lamiates and thistles are present. Fringes of bramble alongside hedges can also be very important. Within arable landscapes, these locations are often the most important habitats for aculeates. Such habitats also provide foraging and hunting opportunities that can be absent in adjacent semi-natural habitats such as unimproved grassland or heathland, and can thereby contribute to complex and dynamic habitat mosaics that operate at a landscape scale and support much richer aculeate assemblages than would be possible if those different habitat and landscape components existed in isolation.

Further unsafe recommendations include that "the water levels of wet habitats such as reed beds, fens and lowland raised bogs should be maintained at high stable levels". Yet summer draw-down is a natural feature of many wetlands, and one that can be crucial for maintaining vegetation zonation, including certain features that specialist wetland aculeates might require, such as nesting areas for the rare wetland bee *Macropis europaea* Warncke (dry peat or earth in and around fen) or the umbellifers required by the rare wasp *Odynerus simillimus* F. Morawitz, as a source of prey. The statement "traditional rotational burning of heathlands should be continued" overlooks the fact that burning is not a strong tradition at many heathlands, and can sometimes damage the entomological interest of a site by eliminating heathers and eradicating insect colonies that are very localized within a site.

Quarrying is cited as one of the causes for habitat loss on a large scale. Yet over much of southern Britain, quarrying tends to be located within agricultural landscapes that have relatively low biodiversity. Where such quarries have become abandoned and left to re-vegetate naturally, they have produced some of our richest, most exciting aculeate sites (see my paper in *BJENH* **19**: 7–33), sites that could not have developed without such a land-use history. Quarrying has probably created far more valuable aculeate habitat nationally than it has destroyed.

Within Table 6 of the paper, some of the species assigned to habitat specialist categories are incorrect. At least half of the eight or so modern records for *Lasioglossum sexnotatum* (Kirby) are for non-heathland sites (S. Falk and A. Knowles data). *Nomada conjungens* Herrich is not a specialist of maritime cliffs (the host bee *Andrena proxima* can colonise a surprisingly diverse array of umbelliferrich habitats and the *Nomada* is found sparingly across this variety of habitats). The process used by Michael Archer to draw up this list (production of a report for Buglife) did not appear to involve widespread consultation with many of the most active British aculeate workers, and is not therefore based on the most current knowledge, which is the impression given in the title. – STEVEN FALK, Warwickshire Museum, Market Place, Warwick CV3 4 4SA.

Reactions to the comments of Steven Falk

I welcome the comments on habitat management which I would regard as extensions and elaborations of my comments. Concerning grasslands, Falk's comments are mainly about the need of flower-rich areas which I included in my advice. I realised that my attempt to provide a list of Priority Species specialists was really a first attempt and would probably need corrections – I carried out some corrections while preparing the paper. I welcome the updating by Falk and would welcome further updating of species and their habitats from fellow naturalists. Finally, my sources of information are clearly stated in my paper so that there is no need for misunderstandings. The profiles published by BWARS are, of course, current information.

MICHAEL ARCHER

ANNOUNCEMENT
NEW BENHS BROCHURE

With this edition of The Journal we are including a copy of the new BENHS brochure which has recently been produced. This brochure updates a more simple black and white version which has been our principle means of publicity for many years. This new version supplements information which appears on the Society's web site. We are sending you a copy both for your information and in the hope that you may be able to attract some new members to the Society. If you know anybody who might be interested in joining perhaps you could you could pass this copy of the brochure to them. If you need further copies, or think that they might be useful for display at a meeting or exhibition that you are attending, please contact: David Young (Membership Secretary) at 22 Wordsworth Close, Saxmundham, Suffolk IP17 1WF (email: bugmanyoung@btinternet.com) who will be pleased to supply them.

With an initial print run of 2000 copies it is estimated this brochure will have a shelf life of about four years. It will then be updated in the light of experience. If you have any comments on the design, illustrations or any other aspect of this project please contact the Membership Secretary at the address given above.

BENHS Council: July 2007